

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 7, line 21, with the following rewritten paragraph:

Now, the whole generating probability $P(t)$ becomes as follows:

$$P(t) \underline{dt} = P_A(t)dt + P_B(t)dt + P_C(t)dt + P_D(t)dt \\ = \Sigma (C \cdot t)^N / N! \exp(-Ct) \cdot [\alpha_t \exp(-\lambda t) \cdot \lambda + C] dt$$

and, since the following equation

$$(C \cdot t)^N / N! = \exp(Ct)$$

is obtained by the Maclaurin's expansion, the probability of the correlated events from the whole parent nuclides to the disintegrated progenies thereof becomes as follows:

$$P(t) \underline{dt} = \{ \alpha_t \cdot \exp(-\lambda t) \cdot \lambda + C \} dt.$$

Please replace the paragraph beginning at page 8, line 10, with the following rewritten paragraph:

Conversely speaking, as being understood from the foregoing, the $P(t)$ is obtained from the time distribution of the plotted incident pulses, by fitting the linear originated in the random events corresponding to the background and the non-linear originated in the correlated events of parent nuclide-disintegrated progenies by using least squares method:

$$P(t) \underline{dt} = \{ \alpha_t \cdot \exp(-\lambda t) \cdot \lambda + C \} dt.$$

The random events portion is then subtracted from the $P(t) \underline{dt}$ to thereby extract the correlated events portion from the parent nuclide to the disintegrated products thereof.